



Application Form for the 2006-2007 High School Fire Science Program



Program Description

- The Montgomery County, Maryland High School Fire Science program is a national award winning one-or two-year program for high school juniors and seniors to educate and train students to become firefighters and/or emergency medical service (EMS) providers in Montgomery County.
- The firefighting track and the EMS track are separate one year programs, allowing students to choose either or both courses of study.
- Both programs are available to juniors and seniors. It is recommended, but not required, that juniors take firefighting their junior year, and EMS their senior year.
- All classes are held from 11:00 AM to 1:30 PM, at the Montgomery County Fire Rescue Training Academy, 9710 Great Seneca Highway, Rockville, MD 20850.
- Montgomery County Public Schools will provide bus transportation from and back to each student's home school, or students may drive to class in their personal vehicles with appropriate permission (MCPS Form 560-31).

Benefits / Credits / Certifications

- Students meet graduation requirements by completing the career development program.
- Students may receive up to nine (9) college credits at the discretion of Montgomery College.
- College tuition costs are reimbursed as established by the Maryland Commission on Higher Education, State Scholarship Administration.
- Students will have the opportunity to earn and submit up to 126 Student Service Learning Hours in one school year.
- Students earn 0.5 Science Credit per semester in Emergency Medical Services track.
- EMS cadets can earn certification as a Maryland Emergency Medical Technician Basic from the Maryland Institute for Emergency Medical Services Systems (MIEMSS).
- Cadet Firefighters earn certification by the Montgomery County Department of Fire Rescue Services.

Entrance Requirements

- Students must be 16 years of age on the day classes begin and have a 2.0 GPA for the previous year.
- Student must pass a National Fire Protection Association (NFPA) 1001 physical examination provided by Montgomery County Fire Rescue Occupational Medical Services (FROMS) prior to the start of the school year. Also note that firefighting skills and lifting and moving patients require good physical fitness and strength. Students with respiratory disorders, such as asthma, may not be able to pass the NFPA physical 1001 examination.
- Students must possess good physical fitness and strength for lifting and moving activities related to this career field.

Program Requirements

- Students must have a 2.0 GPA from the previous school year.
- Students enrolled in either program of study must take modular-based written and practical skills examinations.
- **Students are required to pass all modules in their selected program before completing the state exam. Failure to score 70% on any exam will result in dismissal from the program. Please see modules below.**
- Class work requires reading and comprehension of rigorous technical material, completion of daily homework assignments, and several research papers. Please see the list of required modules on the next page.
- Any absence, whether excused or unexcused, beyond ten percent (10%) of the scheduled classes, is carefully monitored and may lead to dismissal from the program.
- Practical training evolutions in the firefighter classes demand rigorous physical exertion, performing at extreme heights, functioning in confined spaces, and fighting fire under controlled conditions with direct supervision.
- An internship program, including an assignment to a fire department or rescue squad, during class time is included with each course.

Students may choose to join a community volunteer fire/rescue department as a way to enrich the experience in the Fire Science program. **This volunteer experience is not required to complete the MCPS program. An affiliation with a department is required to maintain the EMT/B license. This volunteer experience is not supervised by the MCPS High School Fire Science program; students join these organizations at their own discretion.** If students choose to volunteer, it is recommended that all volunteer standbys be completed during daytime hours and in accordance with work guidelines set by the Fair Labor Standards Act. **Overnight stand-bys are not recommended and are highly discouraged.**

Modules/Units- EMT Basic

Module 1

- Well Being of the EMT-B
- Infection Control
- Medical Legal Aspects
- Anatomy
- Vital Signs
- Lifting and Moving Patients

Module 2

- Airway/Oxygen Therapy

Module 3

- Scene and Initial Assessment
- Trauma and Detailed Physical Exam
- Trauma Assessment Skills
- Geriatric and Pediatric Assessment
- Triage and MCI's
- Communication and Documentation

Module 4A

- Pharmacology, IV Maintenance
- Respiratory Emergencies and Allergic Reactions
- Cardiac Emergencies and AED Introduction and Practice

Module 4B

- Diabetic Emergency and Acute Abdomen
- Neurological Disorders, Strokes and Seizures
- Substance abuse and poisonings
- Environmental emergencies
- Behavioral Emergencies
- Medical Emergency Skills Practice

Module 5

- Kinematics of Trauma
- Injuries (soft tissue, chest, abdomen, genitals, musculo-skeletal, head and spinal)
- Splinting
- Spinal immobilization
- Trauma skills

Module 6

- OB/Gynecological Emergencies
- Pediatric Trauma

Module 7

- Ambulance Operations

Module 8

MIEMSS State Practical Exam

Modules/Units-Fire

Module 1

- Blood Borne Pathogens
- EEO/AA
- Cultural Diversity
- PPE/FIT Testing
- CPR
- Fire Department Organization
- Hose and Rope
- Fire Behavior
- Ladders/ventilation
- Fire Streams

Module 2

- Forcible Entry
- Water Supply
- Fire extinguishers
- Wilderness Firefighting
- Search and Rescue
- Salvage and overhaul

Module 3

- Building Construction
- Sprinklers/Elevators
- Fire Control
- LPG/Foam
- Incident command

Module 4

- Electrical Emergencies/Utilities
- Fire Investigation
- Fire Education
- Auto Fire/Containers
- Metro
- Auto extrication

Module 5

- HazMat
- Voice Radio
- Essentials II
- Flashover
- Survival and Rescue

Uniform Requirements

- Cadets are required to purchase midnight blue trousers, black oxford shoes, and 1 ½" black belt.
- Academy furnishes one (1) long-sleeved and one (1) short-sleeved shirt.

For more information, visit the Web site at www.mcfrs.org/psta



APPLICATION DEADLINE IS APRIL 14, 2006

Please ***print*** all information requested on this application. The student, parent or guardian, and guidance counselor must sign and date this application. Forward the completed application form to Damascus High School at the address listed on the reverse side.

Name: _____ High School: _____
Last First MI

Student ID Number: _____ Current Grade: *Circle one* 10 11

Social Security Number: _____ Date of Birth: _____
(Must be 16 years old by the start of class)

Street Address:

<i>City</i>	<i>State</i>	<i>Zip</i>
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Home Telephone: _____ Student's Cell Phone: _____

Student's E-Mail Address: _____



Parent /Guardian's Name: _____

Parent's Work Phone: _____ Parent's Email: _____

Have you ever applied to the Fire Science Program? *Circle one* Yes No

Will you need transportation to and from the Academy? *Circle one* Yes No

After conferring with your counselor, select the appropriate program in which you plan to enroll during the 2006-2007 school year. **Please check only one of the boxes below.** I want to enroll in.

	 Essentials of Fire Fighting			 Emergency Medical Technician - Basic		
<i>Semester</i>	<i>Title</i>	<i>Code</i>	<i>Credits</i>	<i>Title</i>	<i>Code</i>	<i>Credits</i>
1	Essentials of Fire Fighting A	5423	1.0	Emergency Medical Technician/Basic	5453	0.5
				Emergency Medical Technician/Basic (Science)	3993	0.5
	Essentials of Fire Fighting Internship A	5421	0.5	Emergency Medical Technician/Basic Internship A	5458	0.5
2	Advanced Fire and Rescue Techniques B** ♦	5424	1.0	Emergency Medical Technician/Basic Internship B** ♦	5459	1.0
	Advanced Fire and Rescue Techniques Internship B	5422	0.5	Emergency Medical Technician/Basic (Science)	3994	0.5

**Certificate of Merit

◆ 126 Student Service Learning Hours

An internship program, including an assignment to a fire department or rescue squad, is included with each of the courses listed above. This internship occurs during the 11:00 a.m. – 1:30 p.m. class time.

I have read and understand the program description, entrance requirements, and program requirements as listed on pages 1 and 2.

I understand that my son/daughter will be receiving the same type of training as both Montgomery County career and volunteer firefighters. **I also understand that the risk of injury or burn is a possibility due to the nature of the training my son/daughter is about to receive.** My son/daughter has my permission to participate in this program including the station internship component. To the best of my knowledge, my son/daughter has no physical condition that would impair his/her performance in the Fire Science Program.

Student's Signature: _____ Date: _____

Parent's/Guardian's Signature: _____ Date: _____

Guidance Counselor's Signature: _____ Date: _____

Guidance Counselor's Name: (Print) _____

Forward this application by **April 14, 2006**, along with a *school transcript* and completed *work permit* to:

**Damascus High School
Career and Technology Education Department
25921 Ridge Road
Damascus, Maryland 20872
Attention: Nancy Kemp**

Any questions should be addressed to Nancy Kemp at 301-253-7062 or e-mail...
Nancy_Kemp@fc.mcps.k12.md.us.

For more information visit

www.mcfrs.org/psta --OR-- <http://www.mcps.k12.md.us/departments/cte/>

You will be contacted on or before June 1, 2006, concerning the status of your application. You will be scheduled during June or July for a complete NFPA 1001 physical. Students who fail to show up for the appointment may not be accepted into the program.

The Fire and Rescue Service of Montgomery County is an equal opportunity employer. In accordance with relevant laws and regulations, MCPS prohibits discrimination on the basis of race, color, national origin, marital status, religion, sex, age, disability or sexual orientation in employment or in any of its education programs and activities. Make inquiries or complaints concerning discrimination to the Department of Human Relations, 850 Hungerford Dr., Room 211, Rockville, MD 20850; 301-279-3167; TDD 301-279-3323.